

AMENDMENTS TO THE SPECIFICATION

[0009] Nevertheless, what is common to both OBD-I and OBD-II, is that specialized diagnostic equipment, such as a code readers, are required to be connected to the vehicle's on-board diagnostic connector to download Diagnostic Trouble Codes (DTC) which identify where the problem occurred. In most instances, the more sophisticated diagnostic consoles costing thousands of dollars include the decoding software and firmware capable of supporting both OBD-I and OBD-II automotive diagnostic standards. Furthermore, the sophisticated systems are able to determine which communication protocol the vehicle's on-board diagnostic system utilizes. On the other hand, less expensive units, for do-it yourselfers or small shop use, may only support either OBD-I or OBD-II and may also only support one specific communications protocol. Additionally, there are other more sophisticated universal diagnostic handheld devices capable of supporting both OBD-I and OBD-II, while also having the ability to determine which communication protocol the vehicle utilizes.

[0012] The aforementioned disadvantages are overcome by providing a method for identifying a specific communications protocol used in a vehicle's on-board diagnostic system, wherein the method is implemented using a handheld automotive diagnostic device and cable having a first and second connector, wherein the cable has unique physical layer features that may be correlated to a specific communications protocol and/or automotive diagnostic standard.

[0013] The method comprises connecting the first connector to an input/output connector on the diagnostic device; powering up and initializing the diagnostic device; retrieving cable identification data unique to the physical layer features of the cable; and comparing the retrieved cable identification data with at least one look-up table to identify a correlated communications protocol and/or automotive diagnostic standard.

[0038] The diagnostic device 2 includes on-board diagnostic functionality for both OBD-I and OBD-II ~~protocols~~ standards. The device 2 is preferably provided with various communication protocol functionality for OBD-II systems, including ISO9141, J1850 VPW, J1850 PWM, Keyword 2000 and CAN. For OBD-I systems, the diagnostics device

preferably is provided with various communication protocol functionality for OBD-II systems, including protocols which support GM, Ford and Chrysler OBD-I communication protocols. It is further appreciated that the protocol functionality may be implemented in various manners known in the art, such as by software or dedicated hardware implementations. It is appreciated that any other OBD-I/II communication protocols that exist or developed in the future, could also be included in the diagnostic device 2.